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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,778	04/22/2005	Thierry Novet	Serie 6054	7077
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AIR LIQUIDE			EXAMINER	
Intellectual Property			HEWITT, JAMES M	
2700 POST OAK BOULEVARD, SUITE 1800				
HOUSTON, TX 77056			ART UNIT	PAPER NUMBER
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			03/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,778	<b>Applicant(s)</b> NOVET ET AL.
	<b>Examiner</b> JAMES M. HEWITT	<b>Art Unit</b> 3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 21-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 21-35 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 7/8/05.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Information Disclosure Statement***

Document "C1" listed in the 7/8/05 IDS has not been considered as it has no publication date, as required by 37 CFR 1.98.

***Specification***

A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

Claims 21-35 are objected to because of the following informalities:

In claim 21, line 7, "the orifice" should be "an orifice".

In claim 30, line 8, "the orifice" should be "an orifice".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Straza (US 4,428,361).

With respect to claim 21, Straza discloses an apparatus which may be used as a connecting structure for connecting a fluid circuit section to a chamber, said apparatus comprising: a) a tubular element (30), wherein: 1) said tubular element comprises: i) a first tubular element end; and ii) a second tubular element end; 2) said first tubular element end is connected to the orifice of a chamber (10); and 3) said chamber comprises: i) at least one side made of a thin sheet; and ii) said orifice; and b) a connecting member (element 10 e.g. beneath upper element 10 in Fig. 2), wherein: 1) said connecting member comprises a duct; and 2) said second tubular element end interfaces with, and is sealed to, said duct. Straza fails to teach that his tubular element and chamber are made from metal. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form Straza's tubular element and chamber from stainless steel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claim 22, Straza fails to teach that the thickness of said metal sheet is less than or equal to about 0.4 mm. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the thickness of Straza's metal sheet to be less than 0.4mm since it has been held that

where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

With respect to claim 23, Straza discloses the apparatus of claim 21, wherein both said metal sheet and said tubular element are made of substantially the same grade of metal.

With respect to claim 24, Straza fails to teach that said metal sheet and said tubular element are made of stainless steel. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form Straza's sheet and tubular element from stainless steel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claim 25, Straza discloses the apparatus of claim 21, wherein said connecting member further comprises an internal chamber suitable for connection to a fluid circuit section.

With respect to claim 26, Straza discloses the apparatus of claim 25, wherein said connecting member is made of plastic.

With respect to claim 27, Straza discloses the apparatus of claim 25, wherein: a) said connecting member further comprises a protruding portion; and b) said protruding portion is secured to said metal sheet.

With the tubular element comprising two adjacent elements (10) and the connecting element comprising two adjacent elements (10) beneath the tubular element (10), one of the elements (30) constitutes the claimed protruding portion.

With respect to claim 28, Straza discloses the apparatus of claim 25, wherein said internal chamber has a main direction which is substantially parallel to said metal sheet.

With respect to claim 29, Straza discloses the apparatus of claim 21, wherein: a) said metal sheet includes a series of parallel ducts (refer to Fig. 1); b) said metal sheet is sealed to a membrane (e.g. an element 30); and c) said orifice is located near the end of at least one said parallel duct.

Note that the method of forming the device (i.e. stamping) is not germane to the issue of patentability of the device itself and does not serve to structurally distinguish the claims.

With respect to claim 30 and with reference to the above rejection of claim 21, Straza discloses an apparatus which may be used as a fuel cell, said apparatus comprising a connecting structure for connecting a fluid circuit section to a chamber,

said structure comprising: a) a tubular metal element, wherein: 1) said tubular metal element comprises: i) a first tubular element end; and ii) a second tubular element end; 2) said first tubular element end is connected to the orifice of a chamber; and 3) said chamber comprises: i) at least one side made of a thin metal sheet; and ii) said orifice; and b) a connecting member, wherein: 1) said connecting member comprises a duct; and 2) said second tubular element end interfaces with, and is sealed to, said duct.

Straza fails to teach that his tubular element and chamber are made from metal.

Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form Straza's tubular element and chamber from stainless steel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

With respect to claim 31, Straza fails to teach that the thickness of said metal sheet is less than or equal to about 0.4 mm. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the thickness of Straza's metal sheet to be less than 0.4mm since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

With respect to claim 32, Straza discloses the apparatus of claim 21, wherein both said metal sheet and said tubular element are made of substantially the same grade of metal.

With respect to claim 33, Straza discloses the apparatus of claim 21, wherein said connecting member further comprises an internal chamber suitable for connection to a fluid circuit section.

With respect to claim 34, Straza discloses the apparatus of claim 25, wherein: a) said connecting member further comprises a protruding portion; and b) said protruding portion is secured to said metal sheet.

With the tubular element comprising two adjacent elements (10) and the connecting element comprising two adjacent elements (10) beneath the tubular element (10), one of the elements (30) constitutes the claimed protruding portion.

With respect to claim 35, Straza discloses the apparatus of claim 21, wherein: a) said metal sheet includes a series of parallel ducts (refer to Fig. 1); b) said metal sheet is sealed to a membrane (e.g. an element 30); and c) said orifice is located near the end of at least one said parallel duct.

Note that the method of forming the device (i.e. stamping) is not germane to the issue of patentability of the device itself and does not serve to structurally distinguish the claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached ***Notice of References Cited***.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES M. HEWITT whose telephone number is (571)272-7084. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James M Hewitt/  
Primary Examiner, Art Unit 3679

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